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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/809,137	03/25/2004	Rong-Faa Wu	LELI 3512	7726

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SENNIGER POWERS
ONE METROPOLITAN SQUARE
16TH FLOOR
ST LOUIS, MO 63102

EXAMINER

LUGO, CARLOS

ART UNIT

PAPER NUMBER

3676

DATE MAILED: 11/29/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/809,137

Applicant(s)

WU ET AL.

Examiner

Carlos Lugo

Art Unit

3676

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 March 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5 is/are rejected.
- 7) ☒ Claim(s) 6-10 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 March 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☒ Other: attachment #1.

DETAILED ACTION

Drawings

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the auxiliary apparatus, as claimed in claim 1, must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement-drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the examiner does not accept the changes, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

2. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

3. The abstract of the disclosure is objected to because the abstract exceed the 150-word limit. Correction is required. See MPEP § 608.01(b).

Claim Objections

4. **Claim 1 is objected** to because they include reference characters, R' and r, which are not enclosed within parentheses.

Reference characters corresponding to elements recited in the detailed description of the drawings and used in conjunction with the recitation of the same element or group of elements in the claims should be enclosed within parentheses so

as to avoid confusion with other numbers or characters which may appear in the claims. See MPEP § 608.01(m).

However, applicant is reminded that the use of reference characters is to be considered as having no effect on the scope of the claims.

5. Claims 5 and 6 are objected to because of the following informalities:

- Claim 5 Line 2, change “fist” to -first-.
- Claim 6 Line 4, change “extending is protrusion” to -extending protrusion-.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) The invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 1-3 and 5 are rejected under 35 U.S.C. 102(b) as being anticipated by US Pat No 6,038,894 to Hu.

Regarding claim 1, Hu discloses a reinforced apparatus comprising a housing (72) provided with a recess formed thereon and at least one protruding portion (720) disposed at a predetermined position of the housing; and a rotary member including a first side plate (71), a second side plate (74) and a coiled spring (73) disposed between the first side plate and the second side plate. The coiled spring has a leg for abutting against the at least one protruding portion of the housing.

Hu further discloses a bending member, that when the rotary member and the coil spring are disposed inside the recess of the housing, the bending member is adapted to engage the second side plate in order to keep the rotary member positioned within the recess and operated by an external force.

The bending member will be positioned at a distance with respect to an axis of the housing smaller than a distance from the axis of the housing to the outer edge of the second side plate (see attachment #1).

As to claim 2, Hu discloses that the predetermined bending member of the housing comprises two curved bending members (forming a circle).

As to claim 3, Hu discloses that the predetermined bending member of the housing is an annular bending member.

As to claim 5, Hu discloses that the first side plate (71) has an axial internal ring which is formed with a radially, inward extending projection (710).

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. **Claims 1,4, and 5 are rejected** under 35 U.S.C. 103(a) as being unpatentable over US Pat No 5,727,406 to Banducci in view of EP Pat No 526,409 to Olivari.

Regarding claim 1, Banducci discloses a reinforced apparatus comprising a housing (22) provided with a recess (40) formed thereon and at least one protruding

portion (46 and 48) disposed at a predetermined position of the housing; and a rotary member including a first side plate (20), a second side plate (14) and a coiled spring (18) disposed between the first side plate and the second side plate. The coiled spring has a leg for abutting against the at least one protruding portion of the housing.

However, Banducci fails to disclose that the housing is provided with a bending member, that when the rotary member and the coil spring are disposed inside the recess of the housing, the bending member is adapted to engage the second side plate in order to keep the rotary member positioned within the recess and operated by an external force.

The bending member will be positioned at a distance with respect to an axis of the housing smaller than a distance from the axis of the housing to the outer edge of the second side plate.

Olivari teaches that it is well known in the art of handles to have a housing (10), first and second side plates (7 and 1 respectively) and a spring member (5), wherein the housing cooperates with the second side plate (1) to keep the rotary member positioned within the recess and operated by an external force by means of a bending member (4) introduced into a slot (13) on the housing. When the bending member is positioned into the slot, the bending member will be positioned at a distance with respect to an axis of the housing smaller than a distance from the axis of the housing to the outer edge of the second side plate.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the reinforcing apparatus described by Banducci with a bending member, as taught by Olivari, in order to keep the rotary member positioned within the recess and operated by an external force.

As to the fact that the bending member (4) is at the second side plate and the slot (13) is at the housing, the applicant is reminded that the reversal of components in a prior art reference, where there is no disclosed significance to such reversal, is a design consideration within the skill of the art that will not have any effect in the mechanism of the apparatus.

As to claim 4, Olivari teaches that the bending member (4) comprises several discrete bending members spaced apart from one another.

As to claim 5, Banducci discloses that the first side plate (20) has an axial internal ring which is formed with a radially, inward extending projection (60).

Allowable Subject Matter

10. **Claim 6 is objected** to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Claims 7-10 would also be allowed because the claims depend from claim 6.

Reasons For Allowable Subject Matter

11. The following is an examiner's statement of reasons for allowable subject matter:

Claim 6 presents allowable subject matter over the prior art of record because the teachings of the references taken as a whole do not teach or render obvious the

combination set forth, including that the internal ring of the first side plate includes at least one axially extending protrusion.

Hu (US 6,038,894) discloses that the internal ring comprises an inward extending projection (710) and an outwardly extending lug (711). However, Hu fails to disclose that the internal ring of the first side plate includes at least one axially extending protrusion. Hu only discloses at least one axially extending rib (712) that abuts the leg of the spring. The required extending protrusion (414 of the instant application) is for attach the internal ring to the second side plate (at 422).

Banducci (US 5,727,406), Kim (US 5,265,924), Millman (US 5,481,890) and Yao (US 6,085,561) disclose a similar internal ring as the one described by Hu.

Lin (US 5,157,952) discloses an internal ring (37) having at least one outwardly extending protrusion (373), however, these protrusions are to connect the internal ring to the housing (36), not to attach the internal ring to the second side plate, as stated in the current specification.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Carlos Lugo whose telephone number 571-272-7058. The examiner can normally be reached on 9-6pm EST.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian Glessner can be reached on 571-272-6843. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

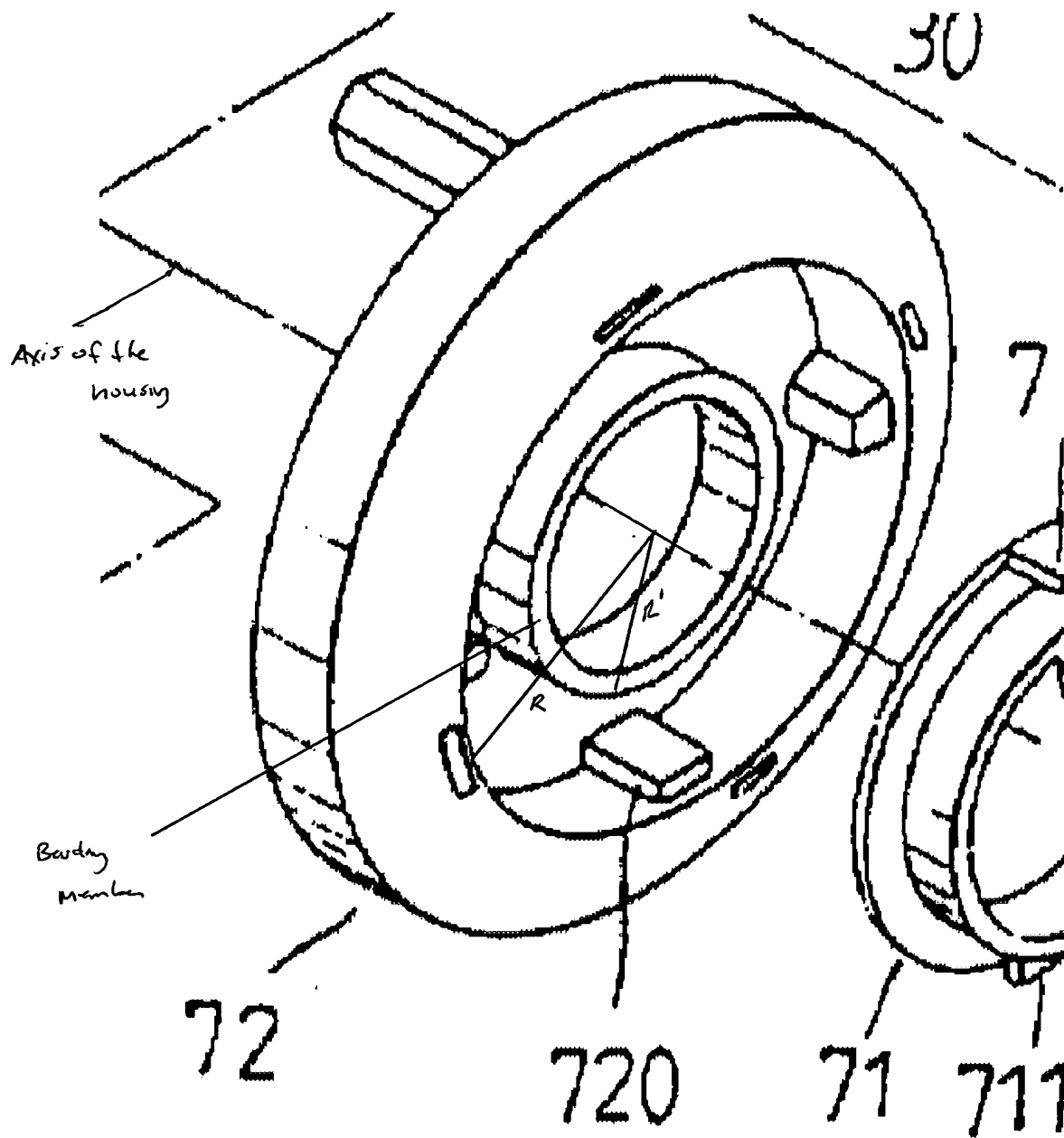
Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-306-5771.

C.L.

Carlos Lugo
AU 3676

November 22, 2005.


BRIAN E. GLESSNER
SUPERVISORY PATENT EXAMINER



Attachment #1